Approved for use through 9/30/2000. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number Complete If Known FEE TRANSMITTAL Application Number 10/767,281 Patentiees are subject to annual revision. 30 January 2004 Filing Date First Named Inventor TAE-SUNG KIM, et al. WARREN, MATTHEW E. Examiner Name Group/Art Unit 2815 TOTAL AMOUNT OF PAYMENT P57002 Attorney Docket No. (\$) 180.00 **FEE CALCULATION METHOD OF PAYMENT (check one)** Fee Fee Fee Fee Fee 1. ■ Payment Enclosed: Code (\$) Code (\$) Fee Description Paid (CHECK #50586) ■ Check □ Credit Card □ Money Order MISCELLANEOUS Other \$ 1801 \$790 2801 \$395 Request for continued examination (RCE) Submission of an IDS \$180.00 Charge Any Additional Fee Required Under 37 C.F.R. §1.16 and 1.17. 1806 \$180 1814 \$130 2814 \$65 Statutory disclaimer 8021 \$40 Recordation of assignment per property Applicant claims small entity status. See 37 CFR 1.27 **TRADEMARK** The Commissioner is hereby authorized to charge any deficiency and credit any over payments to: 6001/7001 \$335 Application for registration, per class 6002/7002 \$100 Amendment to Allege Use, per class Deposit Account Number: 6003/7003 \$100 Statement of Use, per class **FEE CALCULATION** 6004/7004 Request for six-month extension of time, per class \$ Fee Fee Fee Fee \$150 Fee Code (\$) Code (\$) Fee Description Paid 6205/7205 \$100 88 affidavit, per class **EXTENSION OF TIME FEES** 6208/7208 \$200 §15 affidavit, per class 2251 60 6201/7201 \$400 Application for renewal, per class 1251 120 Extension for reply within first month 6403/7403 1252 450 2252 225 Extension for reply within second month \$ \$100 Ex parte appeal, per class 1253 1020 2253 510 Extension for reply within third month **PETITION** Extension for reply within fourth month \$ 1462 \$400 Petitions to Director (Group) 1254 1590 2254 795 Petitions to Director (Group I) \$ 1255 2160 2255 1080 Extension for reply within fifth month 1463 \$200 APPEAL 1464 \$130 Petitions to Director (Group II) 1452 \$500 2452 \$250 Petitions to revive unavoidably abandoned \$ 1401 500 2401 250 Notice of Appeal application Petitions to revive unintentionally abandoned \$ 1402 500 2402 250 Filing a brief in support of an appeal 1453 \$1500 2453 \$750 application **PATENT MAINTENANCE** 1403 1000 2403 500 Request for oral hearing **CLAIMS** 1551 \$900 2551 \$450 Due at 3.5 years Independent claims in excess of 3 \$ 1552 \$2300 2552 \$1150 Due at 7.5 years 1201 200 2201 100 1553 \$3800 2553 \$1900 Due at 11.5 years 1202 50 2202 25 claims in excess of 20 Other Fee (specify) Other Fee (specify) \$ Other Fee (specify) Other Fee (specify) Other Fee (specify) Other Fee (specify) SUBTOTAL: LEFT COLUMN \$ 0.00 \$ 180.00 SUBTOTAL: RIGHT COLUMN Complete (if applicable) **SUBMITTED BY** Typed or Printed 27,774 Name Robert E. Bushnell, Esq. Reg. Number 21 March 2006 **Deposit Account** Signature Date User ID



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: TAE-SUNG KIM, et al.

Serial No.:

10/767,281

Examiner:

WARREN, MATTHEW E.

Filed:

30 January 2004

Art Unit:

2815

For:

NOVEL CONDUCTIVE ELEMENTS FOR THIN FILM TRANSISTORS USED IN

A FLAT PANEL DISPLAY

Information Disclosure Statement

Commissioner for Patents P.O.Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites, describes, and provides copies of the following art references:

FOREIGN PATENT REFERENCE:

Korean Patent Publication No. 10-2002-0055436 to Fujita, et al., entitled ACTIVE
 MATRIX TYPE LIQUID CRYSTAL DISPLAY DEVICE, published on 8 July 2002
 (with English abstract).

OTHER DOCUMENTS:

 Korean Office action for Korean Patent Application No. 10-2003-0015357, issued on 27 February 2006.

DISCUSSION

Fujita KR'436, according to the Korean Office action in applicant's Korean Patent Application No. 10-2003-0015357, discloses that the active matrix type liquid crystal display device includes an active matrix substrate having a transparent insulated substrate on which a thin film

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transistor and a pixel section are formed. A gate electrode of the transistor and a scanning line

connected to the electrode have a TiN/Ti/Al structure or a TiN/Al/Ti structure or a TiN/Ti/Al/Ti

structure. Since a Ti film exists in contact with an Al film, the generation of Al hillock at the Al film

is suppressed. Having the TiN layer at a top layer, surface corrosion at a scanning line terminal

section is suppressed, the increase in the connecting resistance at the section is suppressed and the

reliability is increased.

Pursuant to 37 CFR §1.97(d), the undersigned attorney hereby certifies that each item of

information contained in this Information Disclosure Statement was cited in a communication from

a foreign patent office in a counterpart foreign patent application not more than three (3) months

prior to the filing of the statement.

The citation of the foregoing references is not intended to constitute an assertion that other

or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging

and thorough search of the relevant art.

Pursuant to 37 C.F.R. §1.97(c)(2), the fee set forth under 37 C.F.R.§1.17(p) of \$180.00

accompanies this Information Disclosure Statement. Should the check become lost, be deficient in

payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit

Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,

Robert E. Bushnell Reg. No.: 27,774

Attorney for the Applicant

1522 "K" Street, N.W., Suite 300

Washington, D.C. 20005 Area Code: (202) 408-9040

Folio: P57002 Date: 3/21/06 I.D.: REB/ks

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INFORMATION DE CLOSURE STATEMENT PTO-1449 (PAGE 1 OF 1)

SERIAL NUMBER 10/767,281 DOCKET NO. P57002

APPLICANT TAE-SUNG KIM, et al.

FILING DATE 30 January 2004 GROUP 2815

U.S. PATENT DOCUMENTS							
EXAMINER	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE	
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FOREIGN PATENT DOCUMENTS						TRANSLATION	
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	KR 10-2002-0055436	07/02	KOREA			Abstract	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
Korean Office Action of the Korean Patent Application No. 10-2003-0015357, issued on 27 February 2006							
	Note and Childe Note and Latent Application No. 10-2000-00 10007, issued on 27 1 condary 2000						
							
EXAMINER:			DATE CONSIDERED:				
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP \$609. Draw line through citation if not in conformance and not considered. Include copy of							